What is claimed is:

1. A method of supporting a monitor which is movable along a path of motion, the method comprising converting an ascending energy storage member force curve into a substantially constant supporting force against the monitor.

2. The method of claim 1, wherein converting comprises providing a cam surface oriented so as to run alongside the path in a generally vertical direction and oriented non-parallel to a force applied by an energy storage member.

3. A method of supporting a monitor which is movable along a path of motion, the method comprising:

providing an energy storage member and a cam which are cooperatively positioned so as to move relative to each other along the path of motion;

wherein, as the energy storage member moves along the path relative to the cam, the cam displaces the energy storage member and thereby changes a force applied by the energy storage member on the cam, and wherein the cam converts the force applied by the energy storage member into a supporting force on the monitor.

4. The method of claim 3, wherein the supporting force is parallel to the path.

5. The method of claim 3, wherein as the energy storage member moves along the path, the cam displaces the energy storage member at a different rate than a rate of travel by the energy storage member along the path.

6. The method of claim 3, wherein the cam is oriented so that the cam runs in a direction generally alongside the path of motion.

7. The method of claim 3, wherein the energy storage member is positioned so that the force applied by the energy storage member is oriented in a direction non-parallel to the path.

8. A method of supporting a monitor which is movable along a path of motion, the method comprising:

providing an energy storage member and a cam which are cooperatively disposed so as to move relative to each other thereby defining the path, wherein as the energy storage member moves relative to the cam, the energy storage member applies a varying first force in a generally normal direction against the cam, and wherein the cam converts said first force into a substantially constant supporting force in the direction of the path on the monitor.

9. The method of claim 8, wherein the cam has a generally vertical orientation relative to the path.

10. The method of claim 8, wherein the energy storage member applies the first force in a generally lateral direction relative to the path.

11. The method of claim 8, wherein as the energy storage member moves, the cam displaces the energy storage member at a different rate than a rate of travel by the energy storage member along the path.

12. A method of supporting a monitor which is movable along a path of motion, the method comprising:

providing an energy storage member which applies a force in a direction which is non-parallel to the path, wherein as the energy storage member moves relative to the path, said force varies; and

providing a cam for converting said force into a first reaction force component which is parallel to the path and a second reaction force component which is perpendicular to the first reaction force;

wherein the first reaction force component supports the monitor and is at a substantially constant level as the energy storage member force varies.

13. The method of claim 12, wherein the direction which is non-parallel to the path is substantially perpendicular to the path.

14. A monitor support mechanism comprising:

an energy storage member; and

a cam;

wherein, the energy storage member and the cam are cooperatively positioned so that, as the energy storage member moves along a path relative to the cam, the cam displaces the energy storage member and thereby changes a force of the energy storage member, and wherein the cam converts the force of the energy storage member into a substantially constant supporting force on the monitor.

15. The monitor support mechanism of claim 14, wherein the supporting force is parallel to the path.

16. The monitor support mechanism of claim 14, wherein as the energy storage member moves along the path, the cam displaces the energy storage member at a different rate than a rate of travel by the energy storage member along the path.

17. The monitor support mechanism of claim 14, wherein the cam is oriented so that the cam runs in a direction generally alongside the path of motion.

18. The monitor support mechanism of claim 14, wherein the energy storage member is positioned so that the force applied by the energy storage member is oriented in a direction non-parallel to the path.

19. A monitor support mechanism for supporting the monitor which is movable along a path of motion, the monitor support mechanism comprising:

a cam having a cam surface;

a cam follower for riding along the cam surface; and

an energy storage member for providing a force against the cam follower in a direction which is non-parallel to the path, wherein the cam follower transfers said force to the cam surface in a direction which is non-parallel to the path;

wherein said cam surface converts said force into a first reaction force component which is parallel to the path and a second reaction force component which is perpendicular to the first reaction force, wherein as the energy storage member moves relative to the cam along the path, said energy storage member force varies, and wherein the first reaction force component provides a substantially constant supporting force on the monitor as the energy storage member force varies.

20. The monitor support mechanism of claim 19, wherein the cam surface has a generally vertical orientation.

21. The monitor support mechanism of claim 19, wherein the energy storage member is positioned so that the force applied by the energy storage member is oriented in a direction non-parallel to the path.

22. A monitor support mechanism comprising:

a guide having a path of motion associated therewith;

a cam having a cam profile;

a cam follower adapted to ride on the cam;

a force member to apply a force to the cam follower which forces the cam follower against the cam, the force in a direction which is non-parallel to the path of motion, the cam applies a reaction force against the cam follower which converts the force member force into a first reaction force component in the direction of the path of motion and a second reaction force component; and

a truck coupled to the monitor, coupled with the at least one cam follower, movably coupled with the guide, and movable along the path of motion, the force member applies an increasing force on the cam follower as the truck moves along the path of motion;

wherein, the cam surface profile comprises a shape wherein the first reaction force component is a substantially constant supporting force on the monitor.

23. The monitor support mechanism as recited in claim 22, further comprising an arm rotatably coupled to the truck and having a distal end coupled to the at least one cam follower.

24. The monitor support mechanism of claim 23, wherein the arm includes a plurality of attachment points along a length of the arm and wherein the force member is a spring coupled to the arm at one of the plurality of attachment points.

25. The monitor support mechanism as recited in claim 22, wherein the cam profile generally faces and does not intersect the axis of motion.

26. The monitor support mechanism as recited in claim 22, wherein the path of motion is oriented in a vertical direction.

27. The monitor support mechanism as recited in claim 22, wherein said cam includes opposing inward facing cam surfaces having a decreasing width therebetween towards a lower end of the cam surfaces.

28. The monitor support mechanism as recited in claim 22, wherein said cam includes a pair of outward facing cam surfaces having an increasing width therebetween towards a lower end of the cam surfaces.

29. The monitor support mechanism of claim 22, wherein the truck, the cam follower, and the energy storage member all move in a generally planar arrangement with each other.

30. The monitor support mechanism of claim 22, further comprising a member for increasing a pre-load force on the force component.

31. The monitor support mechanism of claim 22, wherein a frictional force prevents the truck from moving until it is overcome by a pre-determined outside force applied to the truck.

32. A monitor support mechanism comprising:

a support having a guide associated therewith;

a cam having two opposing cam surfaces, the cam surfaces having a distance therebetween, where the distance varies from an upper portion to a lower portion of the cam and wherein the guide is between the two opposing cam surfaces;

two pivoting members each having a cam follower coupled thereto, the cam followers adapted to ride on the opposing cam surfaces, and the cam followers coupled with the pivoting members;

at least one spring coupled between the two pivoting members;

a truck coupled with the two pivoting members and coupled to the monitor, the truck movably coupled with the guide, where the cam follower rides along the cam surface as the truck travels along the guide.

33. The monitor support mechanism as recited in claim 32, wherein the at least one spring is disposed adjacent to a distal end of the pivoting members.

34. A monitor support mechanism comprising:

a support having a guide associated therewith;

a cam having a cam surface, the cam having a curved shape around the guide;

at least one cam follower adapted to ride on the cam surface;

a torsion spring to apply a force for forcing the cam follower against the cam surface, the cam surface converting the force into a first reaction force component in the direction of the axis of motion and a second reaction force component; and

a truck operatively coupled with the at least one cam follower and coupled to the monitor, the truck movably coupled with the guide, where the cam follower rides along the cam surface as the truck travels along the guide.

35. The monitor support mechanism of claim 34, wherein the first reaction force is substantially constant as the truck translates up and down the guide.

36. A monitor support mechanism comprising:

a support having a guide associated therewith;

a cam having a cam surface, the cam having a curved shape around the guide;

at least one cam follower adapted to ride on the cam surface;

a coil spring to apply a force for forcing the cam follower against the cam surface, the cam surface converting the force into a first reaction force component in the direction of the axis of motion and a second reaction force component; and

a truck operatively coupled with the at least one cam follower and coupled to the monitor, the truck movably coupled with the guide, where the cam follower rides along the cam surface as the truck travels along the guide.

37. The monitor support mechanism of claim 36, wherein the first reaction force is substantially constant as the truck translates up and down the guide.

38. The monitor support mechanism of claim 36, wherein each cam follower rides on the cam surface and rotates the cam to increase the spring force.

39. A monitor support mechanism comprising:

a support having a guide associated therewith;

a cam having a cam surface, the cam coupled to the support;

at least one cam follower adapted to ride on the cam surface;

a flat spring to apply a force for forcing the cam follower against the cam surface, the cam surface converting the force into a first reaction force component in the direction of the axis of motion and a second reaction force component; and

a truck operatively coupled with the at least one cam follower and coupled to the monitor, the truck movably coupled with the guide, where the cam follower rides along the cam surface as the truck travels along the guide.

40. The monitor support mechanism of claim 39, further comprising means for changing a pre-load force on the flat spring.

41. A monitor support mechanism comprising:

a first section having a cam follower guide;

a cam having a path of motion relative to the first section;

a cam follower movable within the cam follower guide;

an energy storage member to apply a force to the cam follower which forces the cam follower against the cam, the force in a direction which is non-parallel to the path of motion;

wherein the monitor is coupled to the cam and the energy storage member applies a varying force on the cam follower as the cam moves along the path of motion, the cam converting the varying force into a substantially constant supporting force on the monitor.

42. The monitor support mechanism of claim 41, wherein the cam follower guide is approximately perpendicular to the path of motion.

43. The monitor support mechanism of claim 41, wherein the cam follower guide is angled relative to the path of motion.

44. The monitor support mechanism of claim 43, wherein the cam follower guide angle is substantially normal to a surface of the cam.

45. A monitor support mechanism comprising:

a non-metallic first section having a groove and a cam integral therewith;

a non-metallic truck movable within the groove along a path of motion;

a cam follower coupled to the truck; and

an energy storage member to apply a force to the cam follower which forces the cam follower against the cam, the force in a direction which is non-parallel to the path of motion;

wherein the monitor is coupled to the truck and the energy storage member applies a varying force on the cam follower as the truck moves along the path of motion, the cam converting the varying force into a substantially constant supporting force on the monitor.

46. The monitor support mechanism of claim 45, wherein the non-metallic first section comprises an injection molded plastic section.

47. The monitor support mechanism of claim 45, wherein the energy storage member comprises a fiberglass spring.

48. A monitor support mechanism comprising:

a non-metallic energy storage member comprising a pair of flat spring arms;

a non-metallic truck having at least two cam followers a fixed distance apart from each other, the truck movable relative to the energy storage member along a path of motion, each of the cam followers riding along the flat spring arms and displacing the flat spring arms as the energy storage member along a path of motion;

wherein the monitor is coupled to the truck and the flat spring arms apply a varying force on the cam followers as the truck moves along the path of motion, the pair of flat spring arms converting the varying force into a substantially constant supporting force on the monitor.

49. The monitor support mechanism of claim 48, wherein the non-metallic energy storage member comprises an injection molded plastic member.